```
<110> INCYTE GENOMICS, INC.
      POLICKY, Jennifer L.
      TRIBOULEY, Catherine M.
      TANG, Y. Tom
      BAUGHN, Mariah R.
      GRAUL, Richard
      KHAN, Farrah A.
      NGUYEN, Danniel B.
      PATTERSON, Chandra
      LAL, Preeti
      AU-YOUNG, Janice
      YANG, Junming
      HAFALIA, April
      WALIA, Narinder K.
      DAS, Debopriya
<120> G-PROTEIN COUPLED RECEPTORS
<130> PI-0072 PCT
<140> To Be Assigned
<141> Herewith
<150> 60/193,051; 60/195,155; 60/199,084; 60/200,551; 60/202,278 <151> 2000-03-29; 2000-04-06; 2000-04-20; 2000-04-28; 2000-05-05
<160> 12
<170> PERL Program
<210> 1
<211> 346
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 5628963CD1
<400> 1
Met Glu Arg Lys Phe Met Ser Leu Gln Pro Ser Ile Ser Val Ser
  1
                   5
                                        10
                                                              15
Glu Met Glu Pro Asn Gly Thr Phe Ser Asn Asn Asn Ser Arg Asn
                  20
                                        25
                                                              30
Cys Thr Ile Glu Asn Phe Lys Arg Glu Phe Phe Pro Ile Val Tyr
                  35
                                        40
Leu Ile Ile Phe Phe Trp Gly Val Leu Gly Asn Gly Leu Ser Ile
                  50
                                        55
                                                              60
Tyr Val Phe Leu Gln Pro Tyr Lys Lys Ser Thr Ser Val Asn Val
                  65
                                        70
                                                              75
Phe Met Leu Asn Leu Ala Ile Ser Asp Leu Leu Phe Ile Ser Thr
                  80
                                                              90
                                        85
Leu Pro Phe Arg Ala Asp Tyr Tyr Leu Arg Gly Ser Asn Trp Ile
                  95
                                                             105
                                       100
Phe Gly Asp Leu Ala Cys Arg Ile Met Ser Tyr Ser Leu Tyr Val
                 110
                                       115
                                                             120
Asn Met Tyr Ser Ser Ile Tyr Phe Leu Thr Val Leu Ser Val Val
                 125
                                       130
Arg Phe Leu Ala Met Val His Pro Phe Arg Leu Leu His Val Thr
                 140
                                       145
Ser Ile Arg Ser Ala Trp Ile Leu Cys Gly Ile Ile Trp Ile Leu
                 155
                                       160
                                                             165
Ile Met Ala Ser Ser Ile Met Leu Leu Asp Ser Gly Ser Glu Gln
                 170
                                       175
                                                             180
Asn Gly Ser Val Thr Ser Cys Leu Glu Leu Asn Leu Tyr Lys Ile
                 185
                                       190
                                                             195
Ala Lys Leu Gln Thr Met Asn Tyr Ile Ala Leu Val Val Gly Cys
```

205

210

200

```
Leu Leu Pro Phe Phe Thr Leu Ser Ile Cys Tyr Leu Leu Ile Ile
                215
                                     220
Arg Val Leu Leu Lys Val Glu Val Pro Glu Ser Gly Leu Arg Val
                230
                                     235
                                                          240
Ser His Arg Lys Ala Leu Thr Thr Ile Ile Ile Thr Leu Ile Ile
                245
                                     250
                                                          255
Phe Phe Leu Cys Phe Leu Pro Tyr His Thr Leu Arg Thr Val His
                                     265
                260
                                                          270
Leu Thr Trp Lys Val Gly Leu Cys Lys Asp Arg Leu His Lys
                275
                                     280
Ala Leu Val Ile Thr Leu Ala Leu Ala Ala Ala Asn Ala Cys Phe
                290
                                     295
Asn Pro Leu Leu Tyr Tyr Phe Ala Gly Glu Asn Phe Lys Asp Arg
                305
                                     310
                                                          315
Leu Lys Ser Ala Leu Arg Lys Gly His Pro Gln Lys Ala Lys Thr
                320
                                     325
                                                          330
Lys Cys Val Phe Pro Val Ser Val Trp Leu Arg Lys Glu Thr Arg
                335
                                     340
Val
<210> 2
<211> 910
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 1453124CD1
<400>2
Met Lys Val Gly Val Leu Trp Leu Val Ser Phe Phe Thr Phe Thr
                                      10
Asp Gly His Gly Gly Phe Leu Gly Lys Asn Asp Gly Ile Lys Thr
                 20
                                      25
Lys Lys Glu Leu Ile Val Asn Lys Lys His Leu Gly Pro Val
                                      40
                                                           45
Glu Glu Tyr Gln Leu Leu Gln Val Thr Tyr Arg Asp Ser Lys
                                      55
                                                           60
Glu Lys Arg Asp Leu Arg Asn Phe Leu Lys Leu Leu Lys Pro Pro
                 65
                                      70
                                                           75
Leu Leu Trp Ser His Gly Leu Ile Arg Ile Ile Arg Ala Lys Ala
                 80
                                      85
                                                           90
Thr Thr Asp Cys Asn Ser Leu Asn Gly Val Leu Gln Cys Thr Cys
                 95
                                     100
                                                          105
Glu Asp Ser Tyr Thr Trp Phe Pro Pro Ser Cys Leu Asp Pro Gln
                110
                                     115
                                                          120
Asn Cys Tyr Leu His Thr Ala Gly Ala Leu Pro Ser Cys Glu Cys
                125
                                     130
                                                          135
His Leu Asn Asn Leu Ser Gln Ser Val Asn Phe Cys Glu Arg Thr
                140
                                     145
                                                          150
Lys Ile Trp Gly Thr Phe Lys Ile Asn Glu Arg Phe Thr Asn Asp
                155
                                     160
                                                          165
Leu Leu Asn Ser Ser Ser Ala Ile Tyr Ser Lys Tyr Ala Asn Gly
                170
                                     175
                                                          180
Ile Glu Ile Gln Leu Lys Lys Ala Tyr Glu Arg Ile Lys Gly Phe
                185
                                     190
Glu Ser Val Gln Val Thr Gln Phe Arg Asn Gly Ser Ile Val Ala
                                     205
                200
                                                         210
Gly Tyr Glu Val Val Gly Ser Ser Ser Ala Ser Glu Leu Leu Ser
                215
                                     220
                                                         225
Ala Ile Glu His Val Ala Glu Lys Ala Lys Thr Ala Leu His Lys
                230
                                     235
Leu Phe Pro Leu Glu Asp Gly Ser Phe Arg Val Phe Gly Lys Ala
                245
                                     250
                                                         255
Gln Cys Asn Asp Ile Val Phe Gly Phe Gly Ser Lys Asp Asp Glu
                                     265
```

Tyr	Thr	Leu	Pro	Cys 275	Ser	Ser	Gly	Tyr	Arg 280	Gly	Asn	Ile	Thr	Ala 285
Lys	Cys	Glu	Ser		Gly	Trp	Gln	Val	Ile 295	Arg	Glu	Thr	Cys	
Leu	Ser	Leu	Leu		Glu	Leu	Asn	Lys	Asn 310	Phe	Ser	Met	Ile	
Gly	Asn	Ala	Thr		Ala	Ala	Val	Ser		Phe	Val	Gln	Asn	
Ser	Val	Ile	Ile	Arg 335	Gln	Asn	Pro	Ser	Thr	Thr	Val	Gly	Asn	Leu 345
Ala	Ser	Val	Val	Ser 350	Ile	Leu	Ser	Asn	Ile 355	Ser	Ser	Leu	Ser	Leu 360
Ala	Ser	His	Phe	Arg 365	Val	Ser	Asn	Ser	Thr 370	Met	Glu	Asp	Val	Ile 375
Ser	Ile	Ala	Asp	Asn 380	Ile	Leu	Asn	Ser	Ala 385	Ser	Val	Thr	Asn	Trp 390
Thr	Val	Leu	Leu	Arg 395	Glu	Glu	Lys	Tyr	Ala 400	Ser	Ser	Arg	Leu	Leu 405
				410				Leu	415			Thr		420
				425	_	_			Asp 430	-	_	_	_	435
		_		440		_	_	Gly	445		_	Gln		450
	-			455				Pro	460	_	_	Arg		465
	_		-	470			_		Leu 475					480
				485					11e 490					495
	•			500			_	Pro	505 Leu			Thr		Ile 510 Ile
		-		515					520 Val				_	525
				530				_	535 His		_	_		540
		Ile		545	-		_	Thr	550			Ser		55 5
_	-	Met		560	_		_	Ser	565			Pro		570
		Ile		575		_			580 Ile					585
_	_			590	_			_	595 Phe					600
		_		605					610 Ile	-	-			615
				620					625 Trp					630
				635			_		640 Gly				_	645
				650					655 Ser		_			660
				665			_		670 Arg				_	675
				680					685 Ala					690
				695				Ser	700			Ile		705
_	-	_	_	710					715 Lys					720
				725					730 Leu					735
	_			740					745 Val					750
				755					760 Gly					765
uu	****	-y -5	<u> </u>	1	y	110	****	VUL	~ L y	u	9		~~	9

```
Asp Asp Lys Ala Thr Ile Ile Arg Val Gly Lys Ser Leu Leu Ile
                785
                                     790
                                                          795
Leu Thr Pro Leu Leu Gly Leu Thr Trp Gly Phe Gly Ile Gly Thr
                800
                                     805
Ile Val Asp Ser Gln Asn Leu Ala Trp His Val Ile Phe Ala Leu
                815
                                     820
                                                          825
Leu Asn Ala Phe Gln Gly Phe Phe Ile Leu Cys Phe Gly Ile Leu
                830
                                     835
                                                          840
Leu Asp Ser Lys Leu Arg Gln Leu Leu Phe Asn Lys Leu Ser Ala
                845
                                     850
                                                          855
Leu Ser Ser Trp Lys Gln Thr Glu Lys Gln Asn Ser Ser Asp Leu
                860
                                     865
Ser Ala Lys Pro Lys Phe Ser Lys Pro Phe Asn Pro Leu Gln Asn
                875
                                     880
Lys Gly His Tyr Ala Phe Ser His Thr Gly Asp Ser Ser Asp Asn
                890
                                     895
Ile Met Leu Thr Gln Phe Val Ser Asn Glu
                905
                                     910
<210> 3
<211> 451
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 3226980CD1
<400> 3
Met Glu Ser Ser Pro Ile Pro Gln Ser Ser Gly Asn Ser Ser Thr
  1
                                      10
                                                           15
Leu Gly Arg Val Pro Gln Thr Pro Gly Pro Ser Thr Ala Ser Gly
                 20
                                      25
                                                           30
Val Pro Glu Val Gly Leu Arg Asp Val Ala Ser Glu Ser Val Ala
                 35
                                      40
Leu Phe Phe Met Leu Leu Leu Asp Leu Thr Ala Val Ala Gly Asn
                                                           60
Ala Ala Val Met Ala Val Ile Ala Lys Thr Pro Ala Leu Arg Lys
                 65
                                      70
Phe Val Phe Val Phe His Leu Cys Leu Val Asp Leu Leu Ala Ala
                 80
                                      85
Leu Thr Leu Met Pro Leu Ala Met Leu Ser Ser Ala Leu Phe
                 95
                                     100
                                                          105
Asp His Ala Leu Phe Gly Glu Val Ala Cys Arg Leu Tyr Leu Phe
                110
                                     115
                                                          120
Leu Ser Val Cys Phe Val Ser Leu Ala Ile Leu Ser Val Ser Ala
                125
                                     130
                                                          135
Ile Asn Val Glu Arg Tyr Tyr Tyr Val Val His Pro Met Arg Tyr
                140
                                     145
                                                          150
Glu Val Arg Met Thr Leu Gly Leu Val Ala Ser Val Leu Val Gly
                155
                                     160
                                                          165
Val Trp Val Lys Ala Leu Ala Met Ala Ser Val Pro Val Leu Gly
                170
                                     175
                                                          180
Arg Val Ser Trp Glu Glu Gly Ala Pro Ser Val Pro Pro Gly Cys
                185
                                     190
                                                          195
Ser Leu Gln Trp Ser His Ser Ala Tyr Cys Gln Leu Phe Val Val
                                     205
                200
                                                          210
Val Phe Ala Val Leu Tyr Phe Leu Leu Pro Leu Leu Leu Ile Leu
                215
                                     220
                                                          225
Val Val Tyr Cys Ser Met Phe Arg Val Ala Arg Val Ala Ala Met
                                                          240
                230
                                     235
Gln His Gly Pro Leu Pro Thr Trp Met Glu Thr Pro Arg Gln Arg
                245
                                     250
                                                         255
Ser Glu Ser Leu Ser Ser Arg Ser Thr Met Val Thr Ser Ser Gly
                                     265
                                                          270
                260
Ala Pro Gln Thr Thr Pro His Arg Thr Phe Gly Gly Lys Ala
```

```
280
                275
Ala Val Val Leu Leu Ala Val Gly Gln Phe Leu Leu Cys Trp
                290
                                     295
                                                          300
Leu Pro Tyr Phe Ser Phe His Leu Tyr Val Ala Leu Ser Ala Gln
                305
                                     310
                                                          315
Pro Ile Ser Thr Gly Gln Val Glu Ser Val Val Thr Trp Ile Gly
                320
                                     325
                                                          330
Tyr Phe Cys Phe Thr Ser Asn Pro Phe Phe Tyr Gly Cys Leu Asn
                335
                                     340
                                                          345
Arg Gln Ile Arg Gly Glu Leu Ser Lys Gln Phe Val Cys Phe Phe
                350
                                     355
                                                          360
Lys Pro Ala Pro Glu Glu Glu Leu Arg Leu Pro Ser Arg Glu Gly
                                     370
                365
                                                          375
Ser Ile Glu Glu Asn Phe Leu Gln Phe Leu Gln Gly Thr Gly Cys
                380
                                     385
                                                          390
Pro Ser Glu Ser Trp Val Ser Arg Pro Leu Pro Ser Pro Lys Gln
                395
                                     400
Glu Pro Pro Ala Val Asp Phe Arg Ile Pro Gly Gln Ile Ala Glu
                410
                                     415
                                                          420
Glu Thr Ser Glu Phe Leu Glu Gln Gln Leu Thr Ser Asp Ile Ile
                425
                                     430
                                                          435
Met Ser Asp Ser Tyr Leu Arg Pro Ala Ala Ser Pro Arg Leu Glu
                440
                                     445
Ser
<210> 4
<211> 524
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 269898CD1
<400> 4
Met Cys Gly Ser Glu Arg Ile Leu Gln Ala Gly Asn Ile Leu Glu
Ile Arg Val Gly Gln Ala Gly Ala Arg Arg Val Ala Thr Met Thr
                 20
                                                           30
Ser Pro Val Leu Val Asp Ile Arg Glu Glu Val Thr Cys Pro Ile
                 35
                                      40
                                                           45
Cys Leu Glu Leu Leu Thr Glu Pro Leu Ser Ile Asp Cys Gly His
                                      55
                 50
Ser Phe Cys Gln Ala Cys Ile Thr Pro Asn Gly Arg Glu Ser Val
                                                          75
                 65
                                      70
Ile Gly Gln Glu Gly Glu Arg Ser Cys Pro Val Cys Gln Thr Ser
                                      85
                 ឧ០
Tyr Gln Pro Gly Asn Leu Arg Pro Asn Arg His Leu Ala Asn Ile
                 95
                                     100
Val Arg Arg Leu Arg Glu Val Val Leu Gly Pro Gly Lys Gln Leu
                110
                                     115
Lys Ala Val Leu Cys Ala Asp His Gly Glu Lys Leu Gln Leu Phe
                125
                                     130
Cys Gln Glu Asp Gly Lys Val Ile Cys Trp Leu Cys Glu Arg Ser
                140
                                     145
Gln Glu His Arg Gly His His Thr Phe Leu Val Glu Glu Val Ala
                155
                                     160
Gln Glu Tyr Gln Lys Phe Gln Glu Ser Leu Lys Lys Leu Lys Asn
                170
                                     175
                                                         180
Glu Glu Gln Glu Ala Glu Lys Leu Thr Ala Phe Ile Arg Glu Lys
                                     190
                                                         195
                185
Lys Thr Ser Trp Lys Ala Arg Glu Thr Phe Ser Glu Asp Val Leu
                200
                                     205
                                                         210
Gly Gln Glu Ser Trp Gln Ser Thr Asn Ala Arg Glu Asn Ala Gly
                215
                                     220
                                                          225
Ile Pro Gly Leu Glu Ala Ala His Phe Trp Ile Ala Ile Pro Phe
```

```
230
                                     235
Cys Ala Met Tyr Leu Val Ala Leu Val Gly Asn Ala Ala Leu Ile
                245
                                     250
                                                          255
Leu Val Ile Ala Met Asp Asn Ala Leu His Ala Pro Met Tyr Leu
                260
                                     265
                                                          270
Phe Leu Cys Leu Leu Ser Leu Thr Asp Leu Ala Leu Ser Ser Thr
                275
                                     280
                                                          285
Thr Val Pro Lys Met Leu Ala Ile Leu Trp Leu His Ala Gly Glu
                290
                                     295
                                                          300
Ile Ser Phe Gly Gly Cys Leu Ala Gln Met Phe Cys Val His Ser
                305
                                     310
                                                          315
Ile Tyr Ala Leu Glu Ser Ser Ile Leu Leu Ala Met Ala Phe Asp
                320
                                     325
                                                          330
Arg Tyr Val Ala Ile Cys Asn Pro Leu Arg Tyr Thr Thr Ile Leu
                335
                                     340
                                                          345
Asn His Ala Val Ile Gly Arg Ile Gly Phe Val Gly Leu Phe Arg
                350
                                     355
                                                          360
Ser Val Ala Ile Val Ser Pro Phe Ile Phe Leu Leu Arg Arg Leu
                365
                                     370
                                                          375
Pro Tyr Cys Gly His Arg Val Met Thr His Thr Tyr Cys Glu His
                380
                                     385
                                                          390
Met Gly Ile Ala Arg Leu Ala Cys Ala Asn Ile Thr Val Asn Ile
                395
                                     400
                                                          405
Val Tyr Gly Leu Thr Val Ala Leu Leu Ala Met Gly Leu Asp Ser
                410
                                      415
                                                          420
Ile Leu Ile Ala Ile Ser Tyr Gly Phe Ile Leu His Ala Val Phe
                425
                                     430
                                                          435
His Leu Pro Ser His Asp Ala Gln His Lys Ala Leu Ser Thr Cys
                440
                                                          450
                                     445
Gly Ser His Ile Gly Ile Ile Leu Val Phe Tyr Ile Pro Ala Phe
                455
                                     460
                                                          465
Phe Ser Phe Leu Thr His Arg Phe Gly His His Glu Val Pro Lys
                470
                                     475
                                                          480
His Val His Ile Phe Leu Ala Asn Leu Tyr Val Leu Val Pro Pro
                485
                                     490
                                                          495
Val Leu Asn Pro Ile Leu Tyr Gly Ala Arg Thr Lys Glu Ile Arg
                                     505
                500
Ser Arg Leu Leu Lys Leu Leu His Leu Gly Lys Thr Ser Ile
                515
                                     520
<210> 5
<211> 112
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 4585651CD1
<400> 5
Met Phe Ile Gly Val Leu Asp Leu Phe Phe Ile Ile Leu Ser Tyr
                                      10
Ile Phe Ile Leu Gln Ala Val Leu Gln Leu Ser Ser Gln Glu Ala
                                      25
                                                           30
                 20
Arg Tyr Lys Ala Phe Gly Thr Cys Val Ser His Ile Gly Ala Ile
                 35
                                      40
Leu Ala Phe Tyr Thr Pro Ser Val Ile Ser Ser Val Met His Arg
                                      55
                 50
                                                           60
Val Ala Arg Cys Ala Ala Pro His Val His Ile Leu Leu Ala Asn
                                                           75
                 65
                                      70
Phe Tyr Leu Leu Phe Pro Pro Met Val Asn Pro Ile Ile Tyr
                                                          Gly
                 80
                                      85
                                                           90
Val Lys Thr Lys Gln Ile Arg Asp Ser Leu Gly Ser Ile Pro Glu
                 95
                                     100
Lys Gly Cys Val Asn Arg Glu
                110
```

```
<210> 6
<211> 305
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7472063CD1
<400> 6
Met Glu Phe Val Phe Leu Ala Tyr Pro Ser Cys Pro Glu Leu His
  1
                                       10
Ile Leu Ser Phe Leu Gly Val Ser Leu Val Tyr Gly Leu Ile Ile
                  20
                                                             30
                                       25
Thr Gly Asn Ile Leu Ile Val Val Ser Ile His Thr Glu Thr Cys
                  35
                                       40
                     Tyr Tyr Phe Leu Gly Ser Leu Ser Gly Ile
Leu Cys Thr Ser Met
                                       55
                  50
                                                             60
Glu Ile Cys Tyr Thr Ala Val Val Pro His Ile Leu Ala Asn
                  65
                                       70
Thr Leu Thr Val Arg Glu Asp Ile Thr Leu Leu Gly Cys Ala Thr
                  80
                                       85
                                                             90
Gln Met Ala Phe Phe Ile Ala Leu Gly Ser Ala Asp Cys Phe Leu
                  95
                                      100
                                                            105
Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His Pro
                 110
                                      115
                                                            120
Leu Gln Tyr Pro Leu Leu Met Thr Leu Thr Leu Cys Val His Leu
                 125
                                      130
                                                            135
Val Val Ala Ser Val Ile Ser Gly Leu Phe Leu Ser Leu Gln Leu
                 140
                                      145
                                                             150
Val Ala Phe Ile Phe Ser Leu Pro Phe Cys Gln Ala Gln Gly Ile
                 155
                                      160
                                                            165
Glu His Phe Phe Cys Asp Val Pro Pro Val Met His Val Val Cys
                 170
                                      175
Ala Gln Ser His Ile His Glu Gln Ser Val Leu Val Ala Ala Ile
                                      190
                 185
                                                            195
Leu Ala Ile Ala Val Pro Phe Phe Leu Ile Thr Thr Ser Tyr Thr
                 200
                                      205
                                                            210
Phe Ile Val Ala Ala Leu Leu Lys Ile His Ser Ala Ala Gly Arg
                 215
                                      220
                                                            225
His Arg Ala Phe Ser Thr Cys Ser Ser His Leu Thr Val Val Leu
                 230
                                      235
                                                            240
Leu Gln Tyr Gly Cys Cys Ala Phe Met Tyr Leu Cys Pro Ser
                                                            Ser
                 245
                                      250
                                                            255
Ser Tyr Asn Pro Lys Gln Asp Arg Phe Ile Ser Leu Val Tyr Thr
                 260
                                      265
                                                            270
Leu Gly Thr Pro Leu Leu Asn Pro Leu Ile Tyr Ala Leu Arg Asn
                 275
                                      280
                                                            285
Ser Glu Met Lys Gly Ala Val Gly Arg Val Leu Thr Arg Asn Cys
                 290
                                      295
                                                            300
Leu Ser Gln Asn Ser
                 305
<210> 7
<211> 1625
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 5628963CB1
ggcagcagaa gccagggcag ctgaaagaca gagaccttca gggaaaacta ggttccaaga 60
tggctgaata ggaagagctc cagtctgcag atcccagtgt gagcaacgtg gaagacgggt 120
gatttetgea titeeaactg ageatggaga gaaaatttat gteettgeaa ecateeatet 180 eegtateaga aatggaacea aatggeacet teageaataa eaacageagg aactgeacaa 240
```

```
ttgaaaactt caagagagaa tttttcccaa ttgtatatct gataatattt ttctggggag 300
 tettgggaaa tgggttgtcc atatatgttt teetgeagee ttataagaag teeacatetg 360
 tgaacgittt caigctaaat ciggccatti cagaictect gitcataage acgetteect 420
tcagggctga ctattatctt agaggctcca attggatatt tggagacctg gcctgcagga 480
ttatgtetta tteettgtat gteaacatgt acageagtat ttattteetg acegtgetga 540 gtgttgtgeg ttteetggea atggtteace cetttegget tetgeatgte aceageatea 600
ggagtgcctg gatcctctgt gggatcatat ggatccttat catggcttcc tcaataatgc 660
 teetggacag tggetetgag cagaacggea gtgteacate atgettagag etgaatetet 720
ataaaattgc taagctgcag accatgaact atattgcctt ggtggtgggc tgcctgctgc 780
catttttcac actcagcatc tgttatctgc tgatcattcg ggttctgtta aaagtggagg 840 tcccagaatc ggggctgcgg gtttctcaca ggaaggcact gaccaccatc atcatcacct 900 tgatcatctt cttcttgtgt ttcctgcct atcacacct gaggaccgtc cacttgacga 960
catggaaagt gggtttatgc aaagacagac tgcataaagc tttggttatc acactggcct 1020
tggcagcagc caatgcctgc ttcaatcctc tgctctatta ctttgctggg gagaatttta 1080 aggacagact aaagtctgca ctcagaaaag gccatccaca gaaggcaaag acaaagtgtg 1140 ttttccctgt tagtgtgtgg ttgagaaagg aaacaagagt ataaggagct cttagatgag 1200 acctgttctt gtatccttgt gtccatcttc attcactcat agtctccaaa tgactttgta 1260
tgttacatca ctcccaacaa atgttgattc ttaatattta gttgaccatt acttttgtta 1320
ataagaccta cttcaaaaat tttattcagt gtattttcag ttgttgagtc ttaatgaggg 1380
atacaggagg aaaaatccct actagagtcc tgtgggttga aatatcagac tgggaaaaaa 1440 tgcaaagcac attggatcct acttttcttc agatattgaa ccagatctct ggcccatcag 1500 gctttctaaa ttcttcaaaa gagccacaac ttccccagct tctccagctc ccctgtcctc 1560
ttcaatccct tgagatatag ccaactaacg acgctactgg aagcctttcc agcacaatgg 1620
cggcc
<210> 8
<211> 3446
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 1453124CB1
cagtgagect gtgtteatge cagtgagetg etgtggetea gatactgata etttettee 60
aaacagcata agaagtgatt gagccacaag tatactgaag gaagggctcc ctcgagttgt 120
ggtgtgaaga gataaatcac cagtcacaga ctatgcaccc gactgctgct gttcagtcca 180 ggggaaatga aagttggagt gctgtggctc gtttctttct tcaccttcac tgacggccac 240
ggtggcttcc tggggaaaaa tgatggcatc aaaacaaaaa aagaactcat tgtgaataag 300
aaaaaacatc taggcccagt cgaagaatat cagctgctgc ttcaggtgac ctatagagac 360
tccaaggaga aaagagactt gagaaatttt ctgaagctct tgaagcctcc attattatgg 420 tcacatgggc taattagaat tatcagagca aaggctacca cagactgcaa cagcctgaat 480 ggagtcctgc agtgtacctg tgaagacagc tacacctggt ttcctccctc atgccttgat 540
ccccagaact gctaccttca cacggctgga gcactcccaa gctgtgaatg tcatctcaac 600
aacctcagcc agagtgtcaa tttctgtgag agaacaaaga tttggggcac tttcaaaatt 660
aatgaaaggt ttacaaatga ccttttgaat tcatcttctg ctatatactc caaatatgca 720 aatggaattg aaattcaact taaaaaagca tatgaaagaa ttaaaggttt tgagtcggtt 780
caggicaccc aatticgaaa tggaagcatc gitgctgggt atgaagtigt tggctccagc 840
agtgcatctg aactgctgtc agccattgaa catgttgccg agaaggctaa gacagccctt 900 cacaagctgt ttccattaga agacggctct ttcagagtgt tcggaaaagc ccagtgtaat 960
gacattgtct ttggatttgg gtccaaggat gatgaatata ccctgccttg cagcagtggc 1020 tacaggggaa acatcacagc caagtgtgag tcctctgggt ggcaggtcat cagggagact 1080
tgtgtgctct ctctgcttga agaactgaac aagaatttca gtatgattgt aggcaatgcc 1140
actgaggcag ctgtgtcatc cttcgtgcaa aatctttctg tcatcattcg gcaaaaccca 1200 tcaaccacag tggggaatct ggcttcggtg gtgtcgattc tgagcaatat ttcatctctg 1260 tcactggcca gccatttcag ggtgtccaat tcaacaatgg aggatgtcat cagtatagct 1320 gacaatatcc ttaattcagc ctcagtaacc aactggacag tcttactgcg ggaagaaaag 1380
tatgccaget caeggttact agagacatta gaaaacatca gcactetggt geeteegaca 1440
gctcttcctc tgaatttttc tcggaaattc attgactgga aagggattcc agtgaacaaa 1500
agccaactca agaggggtta cagctatcag attaaaatgt gtccccaaaa tacatctatt 1560 cccatcagag gccgtgtgtt aattgggtca gaccaattcc agagatccct tccagaaact 1620
attatcagca tggcctcgtt gactctgggg aacattctac ccgtttccaa aaatggaaat 1680
gctcaggtca atggacctgt gatatccacg gttattcaaa actattccat aaatgaagtt 1740
ttcctatttt tttccaagat agagtcaaac ctgagccagc ctcattgtgt gttttgggat 1800
ttcagtcatt tgcagtggaa cgatgcaggc tgccacctag tgaatgaaac tcaagacatc 1860 gtgacgtgcc aatgtactca cttgacctcc ttctccatat tgatgtcacc ttttgtcccc 1920
```

```
tctacaatct tccccgttgt aaaatggatc acctatgtgg gactgggtat ctccattgga 1980 agtctcattt tatgcctgat catcgaggct ttgttttgga agcagattaa aaaaagccaa 2040
acctctcaca cacgtcgtat ttgcatggtg aacatagccc tgtccctctt gattgctgat 2100
gtetggttta ttgttggtge cacagtggae accaeggtga accettetgg agtetgeaca 2160
getgetgttgt tetttaeaea ettettetae etetetttgt tettetggat geteatgett 2220
ggcatcetge tggcttaceg gatcatecte gtgttecate acatggceca gcatttgatg 2280 atggctgttg gattttgcct gggttatggg tgccctetca ttatatetgt cattaceatt 2340
getgtcacge aacetagcaa tacetacaaa aggaaagatg tgtgttgget taactggtcc 2400
aatggaagca aaccacteet ggettttgtt gteeetgeae tggetattgt ggetgtgaae 2460
ttcgttgtgg tgctgctagt tctcacaaag ctctggaggc cgactgttgg ggaaagactg 2520 agtcgggatg acaaggccac catcatccgc gtggggaaga gcctcctcat tctgacccct 2580 ctgctagggc tcacctgggg ctttggaata ggaacaatag tggacagcca gaatctggct 2640
tggcatgtta tttttgcttt actcaatgca ttccagggat tttttatctt atgctttgga 2700
atactettgg acagtaaget gegacaactt etgtteaaca agttgtetge ettaagttet 2760
tggaagcaaa cagaaaagca aaactcatca gatttatctg ccaaacccaa attctcaaag 2820 cctttcaacc cactgcaaaa caaaggccat tatgcatttt ctcatactgg agattcctcc 2880 gacaacatca tgctaactca gtttgtctca aatgaataag gcaaggaatc ataaaatcaa 2940
gaaaaaaattt ccagaacaac ttgacattta gagacaaatg tcaatgaaga aattatgctc 3000
agtattcgat cgggttttct gatttagggg tctgggaata aaacaagaat gtctcagtgg 3060
cttcattact gctccctttt gtcttcaatt aaatgaaaag aagatttatt tccatgtgat 3120 ttgattcaaa gaaagtgctc cataaatgca gaagagtagg ttttgttgga aatcgtgtca 3180 gttgtaccct gaccataaaa tatggtttct attttcataa aacagcatta ttcacatggc 3240
atttccaata atctggattg aaggaagaaa attttatgaa atagctttag ataaattaat 3300
aggccacgtt cattitettg teaaaaagtt actggtgggg ggatggtggg aaaaagttat 3360 tagtgcaaat tteetagaga aaaaacatt tetettteaa atttteeagt tgaattttat 3420
gttcgctttt gcttcttagg ttcata
<210> 9
<211> 1731
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 3226980CB1
<400> 9
agttctggaa agggtagaag ggtatggaga acaagaatgg cagaaaggag atggaaaagg 60
aagaggtgaa ggccattccg aaagcggagt gttgagtggg tcaggctcct gcacctctca 120 cgtctcctgc ttcttagcag tcaccaaggc agaccctgca gctacctccg gccagaaagg 180
ggatgagett etgateette agetgeetgg eetggegete tgtaegeaga caaacetgee 240
caagaggete cagtgggagg tgeecectae gaaaccagga ageetgggee tgggetegee 300
atcccagggt cgctggacta ggatggggga tgggcctgtg acaggaggta ccctgggtgc 360
cctctttcgg ccccatggag tcctcaccca tcccccagtc atcagggaac tcttccactt 420
tggggagggt ccctcaaacc ccaggtccct ctactgccag tggggtcccg gaggtggggc 480
tacgggatgt tgcttcggaa tctgtggccc tcttcttcat gctcctgctg gacttgactg 540
ctgtggctgg caatgccgct gtgatggccg tgatcgccaa gacgcctgcc ctccgaaaat 600 ttgtcttcgt cttccacctc tgcctggtgg acctgctggc tgccctgacc ctcatgcccc 660 tggccatgct ctccagctct gccctctttg accacgcct ctttggggag gtggcctgcc 720
geetetaett gtttetgage gtgtgetttg teageetgge cateeteteg gtgteageea 780
teaatgtgga gegetaetat taegtagtee acceeatgeg etaegaggtg egeatgaege 840
tggggctggt ggcctctgtg ctggtgggtg tgtgggtgaa ggccttggcc atggcttctg 900 tgccagtgtt gggaagggtc tcctgggagg aaggagctcc cagtgtcccc ccaggctgtt 960
cactccagtg gagccacagt gcctactgcc agctttttgt ggtggtcttt gctgtccttt 1020
actttctgtt gcccctgctc ctcatacttg tggtctactg cagcatgttc cgagtggccc 1080
gegtggetge catgeageac gggeegetge ecaegtggat ggagacaece eggeaaeget 1140
ccgaatctct cagcagecgc tecacgatgg teaccagete gggggeceee cagaceaece 1200 cacaceggae gtttggggga gggaaageag cagtggttet cetggetgtg gggggacagt 1260
tectgetetg ttggttgece tacttetett tecaceteta tgttgecetg agtgeteage 1320
ccatttcaac tgggcaggtg gagagtgtgg tcacctggat tggctacttt tgcttcactt 1380
ccaaccettt cttctatgga tgtctcaacc ggcagatccg gggggagetc agcaagcagt 1440
ttgtctgctt cttcaagcca gctccagagg aggagctgag gctgcctagc cgggagggct 1500
ccattgagga gaactteetg cagtteette aggggaetgg etgteettet gagteetggg 1560
tttcccgacc cctacccagc cccaagcagg agccacctgc tgttgacttt cgaatcccag 1620
gecagatage tgaggagace tetgagttee tggageagea aeteaceage gaeateatea 1680
tgtcagacag ctacctccgt cctgccgcct caccccggct ggagtcatga t
```

```
<210> 10
<211> 1826
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 269898CB1
<400> 10
gagtttagat aaaagccgag tgagcgcgct ctgttcctta agattagttt aaggtgcctt 180
ggattgetet gaagagettt gaccacetga tattgettae atetggaaet tettggette 240
tcattcccca gatgtgcggg tcagagagga ttctacaggc aggaaacatc ttagaaatca 300 gggttgggca ggcaggagcc aggagagtag ctacaatgac ttcaccagta ctggtggaca 360 tacgagaaga ggtgacctgc cctatctgcc tggagctcct aacagaaccc ctgagcatag 420
actgtggcca cagettetge caageetgca teacaccaaa tggcagggaa teagtgattg 480
gtcaagaagg ggaaagaagc tgccctgtgt gccagaccag ctaccagcca gggaacctgc 540
ggcctaatcg gcatctggcc aacatagtga ggcggctcag agaggtagtg ttgggccctg 600 ggaagcagct gaaagcagtt ctttgtgcag accatggaga aaaactgcag ctcttctgtc 660 aggaggatgg gaaggtcatt tgctggcttt gtgagcggtc tcaggagcac cgtggtcacc 720
acacgtteet egtggaggag gttgeeeagg agtaceagaa gttteaggag tetetaaaga 780
agctgaagaa cgaggagcag gaagctgaga agctaacagc ttttatcaga gagaagaaga 840
catcetggaa ggcaagggag acttttetg aagatgteet ggggeaggaa teatggeaga 900 gtacaaatge aagggaaaat geagggatee eagggetgga ggetgeeeae ttetggattg 960
ccatccettt ctgtgccatg tatcttgtag cactggttgg aaatgctgcc ctcatcctgg 1020
tcattgccat ggacaatgct cttcatgcac ctatgtacct cttcctctgc cttctctcac 1080
tcacagacct ggctctcagt tctaccactg tgcccaagat gctggccatt ttgtggctcc 1140 atgctggtga gatttccttt ggtggatgcc tggcccagat gttttgtgtc cattctatct 1200 atgctctgga gtcctcgatt ctacttgcca tggcctttga taggtatgtg gctatctgta 1260
accoattag gtatacaacc atteteaacc atgetgteat aggeagaatt ggetttgttg 1320
ggctattccg tagtgtggct attgtctccc ccttcatctt cttgctgagg cgactcccct 1380
actgtggtca ccgtgtcatg acacacat actgtgagca tatgggcatc gcccgactgg 1440 cctgtgccaa catcactgtc aatattgtct atgggctaac tgtggctctg ctggccatgg 1500
gactggattc catteteatt gecattteet atggetttat cetecatgea gtettteace 1560
ttccatctca tgatgcccag cacaaagctc tgagtacctg tggctcccac attggcatca 1620
tcctggtttt ctacatccct gccttcttct ccttcctcac ccaccgcttt ggtcaccacg 1680 aagtccccaa gcatgtgcac atctttctgg ctaatctcta tgtgctggtg cctcctgtac 1740 tcaatcctat tctctatgga gctagaacca aggagattcg gagtcgactt ctaaaactgc 1800
ttcacctggg gaagacttca atatga
                                                                                       1826
<210> 11
<211> 1074
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 4585651CB1
gcccgctgct actgtgaaca catggctgtg gtcaggctgg ctgtgggaac actagcttca 60
acaatatcta tggcattgct gtggccatgt ttattggagt gttggatcta ttctttatca 120
tectatetta tatetttate etteaggeag ttetaeaact etceteteag gaggeeeget 180
acaaagcatt tgggacatgt gtctctcaca taggtgccat cttagccttc tacacacctt 240
cagtcatctc ttcagtcatg caccgtgtgg cccgctgtgc tgcgccacac gtccacattc 300 tcctcgccaa tttctatctg ctcttcccac ccatggtcaa tcccatcatc tacggcgtta 360
agaccaagca gatccgtgac agtcttggga gtattcccga gaaaggatgt gtgaatagag 420
agtgaggaat aagtggaaaa agagtggggc acagtgaatg ctgtagtggg ccagggctgt 480
getgagagta gatgggtget agactecaeg tttagttett ttettgtatt atggaaagaa 540
taaatgatgt cctgaagctc agtgccaaca gtctgtttag aatttgtggg tctttgccct 600
ctggtagcct ctggattgaa cctggtgact gtgctgtctc ctcacagagc cctgactcct 660
gtcagtaaac ttgacagagt cttgaccctc eggectcatg gtgactttgc tgaaggacac 720
aaagatgett ceaagtteat ttgeetaaga gaagaetgtg aaaatetgaa ttteeatete 780
tgacttgttg gaaatttggt gaattatcca ctcagattcc cgagttagga cctctactcc 840 atccagtgca ggagttctgc tacattctaa cagttgaacc ctagactcta cctaaacact 900
```

```
gtcagtgctg gtgcacatgc atcctttagg cctatttatt ccaagtgaga cagctctgct 960
tgttagaagg ttatttette aactaageea gtetgtatte tttgacttet ttttacetee 1020
<210> 12
<211> 922
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7472063CB1
<400> 12
atggaatttg tgttcctggc ctatccctcc tgcccagaac tgcatattct gtccttcctt 60
ggggtcagcc tggtttatgg tttgatcatc actgggaaca ttctcattgt ggtgtccatt 120
cacacagaaa cctgtctatg cacatccatg tactatttcc tgggcagcct ttctgggatt 180
gaaatatget acactgeagt ggtggtgeec catateetgg ceaacaceet tacagteaga 240 gaagacatea eteteetggg etgtgeeace cagatggett tetteattge actgggeagt 300 getgattget teetettgge tgeeatggee tatgaceget atgtggeeat ttgeeaceeg 360
ttgcagtacc ctctcctcat gacattgact ctttgtgtcc acttggttgt ggcatcagtc 420
atcagtggtc tgttcctgtc cttacaactg gtggccttca tcttctctct gccattctgc 480 caggctcagg gcattgagca cttcttttgt gatgtgccac cagtcatgca tgttgtttgt 540
geteagagte acatteatga geagteagtg etggtggeag ceatactage cattgetgtg 600 cettlettee teateaceae etectaeaee treatagtgg etgetetget caagateeae 660
teggetgetg geogecaceg ggeettetee acctgetett eccaceteae tgtggtgetg 720
ctgcagtatg gctgctgtgc cttcatgtac ctgtgcccca gctccagcta caaccccaag 780
caagateggt teateteact ggtgtacaca ttgggaacce caetgeteaa eccaettate 840
tatgccctga ggaacagtga gatgaaaggg gccgtaggga gagttcttac caggaactgc 900
ctttcccaga acagctagga aa
                                                                                922
```